



REPORT AND RECOMMENDATIONS OF THE
Urban Air Mobility Advisory Committee



Executive Summary

Background and Purpose

In spring 2021, the Texas Legislature passed Senate Bill 763 in the 87th Regular Session requiring the Texas Transportation Commission to establish the Urban Air Mobility Advisory Committee “to assess current state law and any potential changes to state law that are needed to facilitate the development of urban air mobility operations and infrastructure in this state.”

Urban Air Mobility Advisory Committee Recommendations

Extend the work of the Urban Air Mobility Advisory Committee beyond the sunset date of January 1, 2023, to continue working in key areas of this emerging and quickly evolving industry in order to remain responsive to the needs of Texas and ensure Texas’ role as a leader in this industry.



Airspace and Infrastructure

- **Provide consistency across Texas law** by creating statutory uniformity and standard definitions pertaining to unmanned aircraft operations and urban air mobility/advanced air mobility.
- **Develop an urban air mobility/advanced air mobility-centric research facility** to test and evaluate technology, provide data collection opportunities, and coordinate with federal entities to share information and help guide data-driven public policy. The Texas Legislature is encouraged to consider the benefits of state funding for the successful development and operation of this facility.
- **Develop a statewide plan**, or integration within the Texas Airport System Plan, that addresses the potential locations for and classifications of vertiports and other associated infrastructure to help define the future operational environment of urban air mobility/advanced air mobility.
- **Direct the State to work with municipalities** to provide technical assistance to local governments in adapting and integrating urban air mobility/advanced air mobility in their communities.

Definition UAM

Urban air mobility (UAM) envisions a safe and efficient aviation transportation system that will use highly automated aircraft that will operate and transport passengers or cargo at lower altitudes within urban and suburban areas.

Definition AAM

Advanced air mobility (AAM) builds upon the UAM concept by incorporating use cases not specific to operations in urban environments, such as:

- Commercial intercity (longer range/thin haul).
- Cargo delivery.
- Public services.
- Private/recreational vehicles.



Technology

- **Encourage the development of an urban air mobility/advanced air mobility sandbox by:**
 - a) **Directing the preparation of a feasibility study** to understand the market, differentiating factors from similar existing facilities, potential market/players, funding sources, revenue opportunities, locations, necessary digital and physical infrastructure, and potential use cases; and
 - b) **Pursuing the development of a facility** that will provide opportunity for testing and commercialization that will attract business and move the industry and state forward.
 - c) **Having the State take the initiative to work with industry** to determine additional standards in terms of communications, technology, and environmental awareness systems to encourage consistency and harmony at all levels of government and stakeholders.
- **Consider the initial funding for a UAM/AAM Sandbox Feasibility Study** and ultimately its development along with an incentive program to attract industry with the ultimate objective of using user fees to fund the ongoing operations and maintenance of the sandbox
- **Encourage state agencies to adopt a technology-neutral/open architecture approach** to the urban air mobility/advanced air mobility industry to allow easier adoption of new technologies and deployment into new regions.
- **Identify areas** where technology will drive standardizations.

Urban Air Mobility (UAM) Advisory Committee Guiding Vision

Maximizing “Opportunity” and “Safety”

- 1 Texas will be the destination for early adaptation and development of UAM Technologies.
- 2 UAM will provide extensive business and economic opportunities for our residents.
- 3 The adaptation of a UAM paradigm will create upward social mobility for our residents.
- 4 Texas will be the national role model for the safe deployment of UAM.

Urban Air Mobility Advisory Committee Working Groups



Urban Air Mobility Advisory Committee Meetings

The Urban Air Mobility Advisory Committee held four public meetings which included opportunities for input from stakeholders and the general public. The working groups each held four meetings for a total of 16. All 20 of these meetings were posted in advance on TxDOT’s website and were open to the public. Public comment was welcomed and received at all meetings.



Safety and Security

- In collaboration with the appropriate federal entities, **the state will work to encourage the development of minimum standards/safety management systems** for vertiport operations including passenger and goods movements and ground infrastructure.
- **Recommend** Texas law does not conflict with federal law.
- **Encourage the Legislature remain an active participant** in urban air mobility/advanced air mobility as the industry and technology will outpace current regulations and enable the appropriate state agency to lead and manage the regulatory concerns.
- **Direct the Texas Department of Transportation** to review existing state aviation standards and guidelines, airport facility planning, and compatibility guidance to ensure they apply to urban air mobility/advanced air mobility.
- **Support the development of standardizations** at the federal level and within industry as technology develops/changes so safety is prioritized as the technology matures.
- **Encourage state-level cooperation with local governments** to ensure appropriate preparation, training, and safety practices associated with vertiport operations including law enforcement, fire service, and emergency medical services associated with traditional aviation and advanced air mobility aircraft operations.



Commerce and Community Integration

- **Direct all law enforcement and first responder agencies** to adopt education and training recommendations as identified in Unmanned Aircraft: Responding to and Recovering from Disasters (State of Texas, November 2020), a report born out of House Bill 2340 (86R, 2019), establishing a small unmanned aircraft study group for a statewide response team.
- **Create a statewide primary point of contact** to direct urban air mobility/advanced air mobility workforce development efforts, lead public awareness and education efforts, and collaborate with local, regional, state, and federal entities to encourage more input and participation.
- **Direct the State to provide resources and assistance** on the use of urban air mobility/advanced air mobility technology infrastructure for cities, local and regional governments, transportation planning organizations, other entities, and industry to better identify what the different levels of government can do to integrate industry innovation and community vision and help promote urban air mobility/advanced air mobility technology.
- **Direct the appropriate state agencies** to jointly collaborate with local school districts, higher education institutions, and any interested private and/or public stakeholders on educational opportunities related to urban air mobility/advanced air mobility technologies.



In Closing

The recommendations developed by this committee represent the culmination of many meetings and hours of discussion on how best to position our state to facilitate the emerging and quickly evolving advanced air mobility industry.

The committee recognizes that many of the recommendations may add additional workload to some agencies such as the TxDOT Aviation Division. The Aviation Division, which currently has responsibilities surrounding the planning, programming, and funding of airport projects across the state

as well as some aviation education responsibilities, is likely to find itself as the focal point for several of these recommendations. The committee understands that many of the additional roles and responsibilities imbedded within its recommendations will be best addressed and carried out with appropriate accompanying resources.

The committee would like to thank the Texas Legislature and TxDOT for the opportunity to participate in this important work and their commitment to advanced air mobility.

Thank you

REPORT AND RECOMMENDATIONS OF THE Urban Air Mobility Advisory Committee

PREPARED FOR THE
Texas Transportation Advisory Commission Advisory Committee



FOR MORE INFORMATION

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<https://www.txdot.gov/inside-txdot/division/planning/urban-air-mobility-advisory-committee.html>